


## Chapter 7

# Professional Development to Promote Online Communication, Collaboration and Learning Among Faculty: A Community of Practice Approach

**Mayela Coto**

 <https://orcid.org/0000-0002-4558-3671>

*Universidad Nacional, Costa Rica*

**Lone Dirckinck-Holmfeld**

*Aalborg University, Denmark*

### ABSTRACT

*Based on a critical re-reading of a study of a community of practice approach to professional development, this chapter uses Engeström's activity theory model to highlight the tensions that arise in a professional development program oriented to change teaching practice through the introduction of ICT and a student-centered pedagogical approach. Despite the community of practice potential, there are many tensions that inhibit this type of professional learning. These tensions can be summarized in four broad categories: institutional structures (division of work), the institutional culture (rules), levels of engagement (differentiations within the community), and faculty readiness (in the appropriation of tools and new pedagogy). By analyzing, in greater depth, the tensions, our goal is to reflect again in the design principles and to further elaborate on developing a professional development strategy based on a community of practice approach that can be used in broader contexts.*

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## INTRODUCTION

To contribute to today's innovation-driven economy, universities must integrate new teaching and learning approaches that allow students to develop skills such as collaboration, problem solving, and critical and creative thinking (Adams et al., 2018). These challenges, together with the principles of long-life learning, online learning and blended learning, imply new demands for faculty, who must be prepared to face the growing expectations of being competent, both in terms of promoting the development of these new skills in the students as in the integration of content, pedagogy and technology (Crawford, 2008; Wall, 2013).

In general, the task of preparing faculty to meet these challenges relies in faculty professional development programs. Literature stresses that these programs must address changes in beliefs, knowledge, and habits of practice, in order to achieve changes in the quality of teaching and learning (Gibbs & Coffey, 2004; Light & Calkins, 2008; Ödalen, Brommesson, Erlingsson, Schaffer, & Fogelgren, 2019). Literature also shows that traditional professional development (event-based, one-hit training workshops) has been shown ineffective in supporting change in teaching practices. These shortcomings have provoked an interest towards community inspired models.

In the last decade, research has shown that communities of practice (Wenger, 1998) can be a catalyst to improving faculty' professional practice (Coto, 2010, 2014; Lantz-Andersson, Lundin, & Selwyn, 2018; Patton & Parker, 2017; Schlager & Fusco, 2004; Sherer, Shea, & Kristensen, 2003). The notion of building learning communities has become a very valuable mean for engaging faculty in meaningful and effective professional learning (Barab, Kling, & Gray, 2004; Macià & García, 2016; MacPhail, Patton, Parker, & Tannehill, 2014; Patton & Parker, 2017; Wing Lai, Pratt, Anderson, & Stigter, 2006). In addition, the technological infrastructure currently available in many higher education institutions has the potential to create online and distributed learning environments that can facilitate and extend the professional development of teachers (Lock, 2006).

Despite its potential, there are many obstacles that inhibit this type of professional learning. Many of the faculty members do not have the knowledge, experience and skills necessary to work as productive members of a community of practice. They are very pressured by time, with the growing demand for teaching and research, and do not always receive incentives or support from the institution to participate in professional development activities (Coto, 2010, 2014; Powell & Bodur, 2019; Tsiotakis & Jimoyianis, 2016). Further in a resource constraint setting, there may be additional challenges with respect to access to IT, Wi-Fi and Internet, and fewer experiences with the use of IT tools for teaching and learning.

This chapter is based on previous studies (Coto, 2010, 2014) that has its roots in the interlacing of two main theoretical areas: professional development (PD) in higher education and learning in communities of practice (CoP). In this chapter, and responding to a fifth phase of the design-based research methodology - Dissemination and adoption in broader contexts- (Coto, 2010; Reeves, 2006), we will revisit the data but this time we will use activity theory (Engeström, 1987; Engeström, 2001) to analyze the tensions and contradictions that have been identified in the first analysis of the data, in order to broaden the application of the design principles. As such we will be looking into "secondary contradictions emerging between constitutive components of an activity system" (Sannino & Engeström, 2018, p. 49).

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